

Broadband Access via TV Cable in Germany

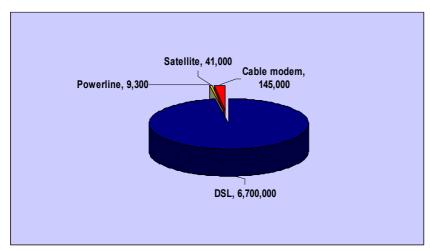
Volker Wirsdorf/Sabrina Rigo U.S. Commercial Service Germany November 2005

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Summary

In 2004, the number of broadband Internet connections in Germany grew by 50% to 6.9 million, yet only 22% of all households have broadband Internet access. With a 97% market share, DSL is the dominating access technology. Alternative technologies such as bidirectional cable TV, satellite and powerline are still in their infancy.

Number of Broadband Connections in Germany (2004)

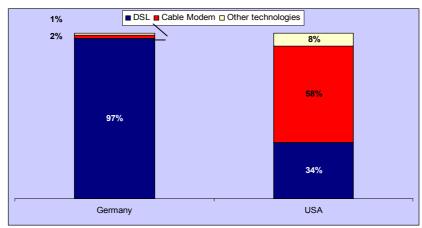


(Source: Monitoring Informationswirtschaft, 8. Faktenbericht 2005)

Internet access via cable TV is, so far, available in a few regions only. Nevertheless, this technology appears to have the potential to become a serious alternative to DSL. Upgrading the existing infrastructure with bidirectional cable connections will cost billions of Euros – an investment the cable TV providers are willing to make in light of the fact that nearly 18 million households are already connected to their networks, albeit not all with the necessary bidirectional lines.

A comparison with broadband access technologies in the United States shows that cable is more than just a competitive access technology: nearly 70 % of Internet access in the United States is via TV cable.

Broadband Connections in Germany and the United States in 2004



(Source: Monitoring Informationswirtschaft, 8. Faktenbericht 2005)

A. Market Overview

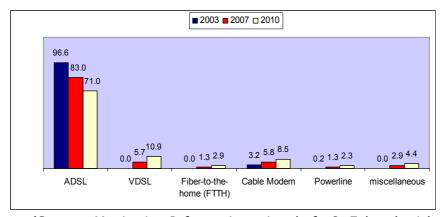
The dominating broadband technology in Germany is DSL. The German "Federal Network Agency" (Bundesnetzagentur - the German equivalent of the FCC – formerly RegTP) expects cable TV to develop into an attractive alternative in the near future. The three largest providers have already upgraded their networks to the extent that they connect more than 3 million households to the Internet with bidirectional cables.

Although prices for broadband access are reasonable, Germany has a below average broadband access compared with other countries. Late roll-out and deployment of DSL lines, an initial focus on fiber and ISDN by Deutsche Telekom (DATG), a difficult competitive situation with quasi-monopolistic structures allowing DTAG to dominate supply during the starting phase of DSL, and political (cartel law) considerations obstructing the privatization/divestiture of the cable networks all obstructed fast and competitive roll-out of broadband access technology, especially cable TV.

B. Market Highlights -Trends

Of access technologies, Internet access via cable networks is expected to reach a share of 8.5% in 2010 .

Broadband Access Technologies in Germany in %

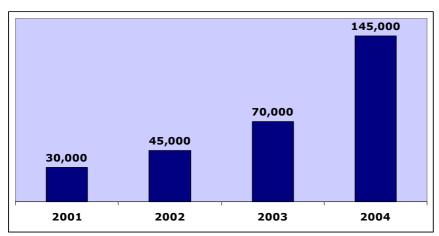


(Source: Monitoring Informationswirtschaft, 8. Faktenbericht 2005)

Experts estimate that approximately 4.1 millions households will be able to connect to Internet and telephone networks via cable-TV technology by the end of 2005. Cable network operators are believed to invest EUR 38 million in marketing and product development.

According to the German FCC equivalent, "Bundesnetzagentur," (formerly RegTP), the number of users accessing the Internet via cable modem has doubled within one year to 145,000.

Cable Modem Access, 2001 - 2004



(Source: Monitoring Informationswirtschaft, 8. Faktenbericht 2005)

Hybrid solutions

In order to be able to offer high-speed Internet, providers have to make large investments in their infrastructure (to install/upgrade to bidirectional lines). As an alternative to upgrading the physical backbone, experts believe that providers will explore the option of offering their services via hybrid solutions, where one channel runs over the cable network, the necessary second channel uses an alternative network (e.g., mobile networks).

C. Competition

The three largest Internet access providers via cable are Kabel Deutschland, iesy, and Kabel BW (Baden-Wuerttemberg). The regions in which they are active are identified in the map below. Other providers are listed under "Contact Information"

Cable Network Operators and their Networks in Germany



Market leader "**Kabel Deutschland**" operates its cable networks in 13 federal states, providing TV connections to 9.7 million households. The company is the biggest cable network operator in Europe. Its number of high-speed Internet subscribers increased within one year from 4,900 (2004) to 15,200 (July 2005). The company plans to launch broadband Internet access as well as telephony via cable in Rhineland-Palatinate and Saarland and in at least large 15 cities (among them Munich, Berlin, Hamburg, and Leipzig) before the end of 2005.

Ish GmbH & Co.KG/iesy Hessen GmbH & Co.KG. In 2005, the Federal Cartel Office allowed the fusion of Ish and iesy. The name of the holding company is Unity Media GmbH. Both companies together supply 5.2 million households with 27,500 cable Internet connections. About 20% of their networks have already been upgraded for high-speed Internet.

Kabel Baden Württemberg (Kabel BW) provides 2.3 million households with television and radio and connects nearly 40,000 subscribers to the Internet. In 2004, the company invested EUR 50 million in the upgrade and modernization of its networks.

D. Market Access/Regulations

There is no legal provision stipulating that communication service providers in Germany have to provide their services in all of Germany (most rural areas will not have broadband access to via TV-cable). Operators of Internet infrastructure are in principle also allowed to provide content via their network, cartel law provisions, however, apply.

In July 2005, the Regulatory Authority for Telecommunications and Posts was renamed the Federal Network Agency. The central task of the Federal Network Agency is to ensure compliance with the Telecommunications Act (TKG), thus enabling fair and working competition, efficient and interference-free use of frequencies, and protecting public safety interests. For further information, please see http://www.bundesnetzagentur.de/

E. Trade Promotion Opportunities

Trade Fairs

In Germany, trade fairs play an estraordinary large role in product marketing. U.S. companies wishing to penetrate the German market often make their first approach at major trade fairs. For U.S. manufacturers and exporters wishing to sell in Germany (and in Europe) it is important to exhibit at one of Germany's major international fairs. Exhibiting at fairs can bring direct sales, but, more significantly, it can be one of the least expensive ways to test the market's receptivity for multimedia-based products and services. Further, the strength and scope of the competition can be assessed and contacts with others "in the trade" can be established. From these contacts, U.S. companies can gather a great deal of valuable information about marketing in Germany and Europe.

"Anga Cable", a trade fair for cable, satellite and multimedia, is held annually in Cologne. The next "Anga Cable" will take place May 30 - June 1, 2006. Further information can be obtained from:

ANGA Service GmbH Sebastianstraße 189 53115 Bonn

Phone: +49 (0) 22-896-218-90 Fax: +49 (0) 22-896-218-95 E-Mail: <u>info@angacable.de</u>

www.angacable.de

Koelnmesse GmbH Messeplatz 50679 Köln

Phone: +49 (0) 22-1821-0 Fax: +49 (0) 22-1821-2574 E-Mail: <u>info@koelnmesse.de</u>

www.koelnmesse.de

Advertising

In Germany, trade publications are important promotion vehicles. Listed below are the leading trade publications for the German telecommunications industry, which are suitable for advertising. Detailed information and current advertising rates are available upon request from the publishers.

PC Welt

IDG Magazine Verlag GmbH Lyonel-Feininger-Straße 26 80807 München

Phone: +49 (0) 89-36086-222 Fax: +49 (0) 89-36086-459

E-Mail: pressemitteilung@pcwelt.de

http://www.pcwelt.de

PC Magazin

WEKA Computerzeitschriften-Verlag GmbH Redaktion PC Magazin Gruber Str. 46a 85586 Poing

Phone: + 49 (0) 8121-95-1111 Fax: + 49 (0) 8121-95-1621 Email: redaktion@pc-magazin.de http://www.pc-magazin.de

Telecom Handel

Neue Mediengesellschaft Ulm mbH Konrad-Celtis-Straße 77 81369 München

Phone: +49 (89) 74117-0 Fax: +49 (89) 74117-153

E-Mail: redaktion@telecom-handel.de

http://www.telecom-handel.de

Relevant Websites:

German E-Commerce Association (www.eco.de)
Association for Electrical, Electronic and Informational Technologies (www.vde.de)
European Committee for Standardization (www.cenorm.de)
National Institute of Standards and Technology (www.nist.gov)
European Committee for Electrotechnical Standardization (www.cenelec.org)

- www.kabeldeutschland.de
- www.ish.de
- www.iesy.de
- <u>www.telecolumbus.de</u>
- www.kabelbw.de
- www.aqf.de
- www.bitkom.de
- www.breitbandinitiative.de
- www.bundesnetzagentur.de
- www.deutscherkabelverband.de
- www.ecin.de
- www.faz.de
- www.heise.de
- www.infosat.de
- www.netzeitung.de
- <u>www.onlinekosten.</u>de
- www.pcwelt.de
- www.teltarif.de
- www.vatm.de
- www.verbrauchernews.de
- www.zukunft-breitband.de
- H. Contact information

Cable access providers:

Provider	website
1 ddkom - Die Dresdner Telekommunikationsgesellschaft mbH	http://www.ddkom.de
2 ewt breitbandnetze GmbH (Bosch)	http://www.blue-cable.de
3 ewt GmbH	http://www.ewttss.de
4 Iesy Hessen GmbH & Co. KG	http://www.iesy.de
5 ish GmbH & Co. KG	http://www.ish.de
6 Kabel Baden-Württemberg GmbH & Co KG	http://www.kabelbw.de
7 Kabel Deutschland GmbH	http://www.kabeldeutschland.de
8 Kabelfernsehen München ServiCenter GmbH & Co.KG	http://www.cablesurf.de
9 km3 teledienst GmbH	http://www.km3.de
10 komro GmbH	http://www.komro.de
11 MDCC Magdeburg-City-Com GmbH	http://www.mdcc.de
Media Neubrandenburg Gesellschaft für	
12 Internet- und Intranetdienstleistungen mbH	http://www.media-n.de
13 NetCologne	http://www.netcologne.de
14 Ost Tel Com GmbH	http://www.osttelcom.de
15 PrimaCom AG	http://www.primacom.de
16 RFT radio-television Brandenburg GmbH	http://www.rftonline.net
17 SDTelecom Telekommunikations GmbH	http://www.sdtelecom.de
18 Tele Columbus GmbH	http://www.telecolumbus.de
19 ÜWU Mediendienste GmbH	http://www.pep-com.de
20 Wikom Electric GmbH	http://www.barnaunet.de
21 wilhelm.tel GmbH	http://www.wilhelm-tel.de

For more information on Germany's telecommunications market and on how the U.S. Commercial Service can assist U.S. companies develop their business in the German market, please contact:

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Tel: 49-69-7535-3150 Fax: 49-69-7535-3171

Email: Volker.Wirsdorf@mail.doc.gov

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You can locate your nearest U.S. Export Assistance Center, as well as Commercial Service offices overseas by visiting www.buyusa.gov.

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